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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,038	07/29/2003	Zhenghua Yu	CR1114AC	9271
<div>7590 09/17/2007 DANIEL K. NICHOLS Motorola, Inc. - Law Department 1303 E. Algonquin Road Schaumburg, IL 60196</div>			<div>EXAMINER KAU, STEVEN Y</div>	
			<div>ART UNIT 2625</div>	<div>PAPER NUMBER</div>
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/631,038

Applicant(s)

YU ET AL.

Examiner

Steven Kau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 14-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. This action is responsive to the following communication: an Amendment filed on July 10, 2007.

- Claims 6-13 rejection under 35 U.S.C. § 101 is hereby withdrawn since claims 6-13 have been cancelled.
- Claims 1-5 and 14-21 are pending.
- Applicant's arguments filed on July 10, 2007 have been fully considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-4, 14-15, 18-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhong et al (Zhong) (US 2004/0247034) in view of Clark (US 6,142,942).

Regarding **claim 1**, Zhong discloses post-processed architecture, in that he teaches a system suitable for adaptive post-processing of media data in an electronic device (Figs 1-5, Para. [0001] and [0006]), the system comprising: a. one or more post-processing modules (post-processing module 611 of Fig. 6),

the post-processing modules performing post-processing of the media data (such as video image data, Para. [0036]), each post-processing module comprising one or more processing modes with different complexities (such as post-processing controller (PPC) 720, buffer 725, blocking filter 730 and ringing filter 740 of Fig. 7, Para. [0038]); and b. an adaptive mode decision module {e.g. central processing unit issues command for post-processing} coupled to the post-processing modules (CPU 505/CIF 601 of Fig. 6, Para. [0010]), wherein the adaptive mode decision module decides suitable processing modes to be used in the post-processing modules (CPU issues command for post-processing, for example, YUV to RGB color space conversion, Para. [0035]), the decision being based on one or more values of input parameters (Para. [0035] & [0036]).

Zhong differs from claim 1, in that he does not teach that the input parameters being representative of the state of the electronic device.

Clark discloses an ultrasound imaging system, in that he teaches that the input parameters being representative of the state of the electronic device (an input data power level, col 12, lines 25-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zhong to include the input parameters being representative of the state of the electronic device taught by Clark to ensure focal strength and pulse repetition interval to maximize the contrast effect (col 9, lines 25-30).

Regarding **claim 3**, Zhong differs from claim 3, in that he does not teach wherein one of the input parameters is remaining battery power of the electronic device.

Clark teaches wherein one of the input parameters is remaining battery power of the electronic device (col 12, lines 25-46).

Regarding **claim 4**, Zhong differs from claim 4, in that he does not expressly teach wherein one of the input parameters is processor usage of the electronic device.

Clark teaches wherein one of the input parameters is processor usage of the electronic device (Controller 69 of Fig. 2A & 2B, controller (processor) is configured to generate the filter parameters based upon one or more signal constraints that are input by a user/operator/designer and based upon one or more sample signal statistics associated with one or more sample input or output signals of col 2, lines 17-39).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zhong for claims 3 and 4 to include one of the input parameters is remaining battery power of the electronic device and one of the input parameters is processor usage of the electronic device taught by Clark to eliminate manual adjust filter settings (col 3 , lines 5-7).

Regarding **claim 14**, Zhong teaches a computer program product for use with a computer (Computer System of Fig. 5), the computer program product comprising a computer usable medium having a computer readable program code embodied therein for adaptive post-processing of media data in an

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electronic device (Figs 1-5, Para. [0001] and [0006]), the post-processing being performed using one or more post-processing modules (Fig. 7, Para. [0034] & [0036]), the post-processing modules comprising one or more processing modes with different complexities (Figures 4-8, Para. [0039]), the computer program code performing: b. selecting suitable processing modes for the post-processing modules (Mode Check circuit 910 of Fig. 9, Para. [0045]), the selection being based on the input parameters (Fig. 9, Para. [0059]), and the complexity of the processing modes (Figures 2, 4, 8 and 9, Para. [0026], [0042] and [0059]) ; and c. performing post-processing of the media data using the suitable processing modes (Figures 2, 4, 8 and 9, Para. [0026], [0042] and [0059]).

Zhong differs from claim 14, in that he does not expressly teach that obtaining one or more input parameters, the input parameters influencing the post-processing of the media data.

Clark teaches that obtaining one or more input parameters (an input data power level, col 12, lines 25-46), the input parameters influencing the post-processing of the media data (col 12, lines 25-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zhong to include the input parameters being representative of the state of the electronic device taught by Clark to ensure focal strength and pulse repetition interval to maximize the contrast effect (col 9, lines 25-30).

Regarding **claim 15**, Zhong teaches wherein the computer program code for obtaining the values of one or more input parameters comprises a computer

program code for continuously monitoring the values of the input parameters (Figures 2-10, Para. [0039]).

Regarding **claim 18**, the structure elements of system claim 3 perform all steps of computer program product claim 18. Thus claim 18 is rejected under 103(a) for the same reason discussed in the rejection of claim 3.

Regarding **claim 19**, the structure elements of system claim 4 perform all steps of computer program product claim 19. Thus claim 19 is rejected under 103(a) for the same reason discussed in the rejection of claim 4.

Regarding **claim 21**, in accordance with claim 14, Zhong teaches wherein the computer program code for selecting the suitable processing modes comprises a computer program code including: a. obtaining a combination of processing modes to be used for each input parameter value (Para. [0039]); b. determining an overall complexity for each of the combinations corresponding to the input parameter values (Para. [0030 & 0039]); and c. selecting the combination of the processing modes having minimum overall complexity (Para. 0028)).

4. Claims 2, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhong et al (Zhong) (US 2004/0247034) in view of Clark (US 6,142,942) as applied to claims 1 & 14 above, and further in view of Maeda et al (Maeda) (US 7,170,615).

Regarding **claim 2**, Zhong teaches wherein the adaptive mode decision module comprises: (a). an input module (input device 512 and associated

memory of Fig 5, Para. [0033] and [0039]), the input module receiving the input parameters (such as Y, U, V and other color input data, Para. [0039]), and (c). an output module coupled to the input module and the table module, the output module selecting the suitable processing modes of the post-processing modules (Para. [0059]).

Zhong differs from claim 2, in that he does not teach that (b). a table module relating the processing modes of the post-processing modules and all possible values of the input parameters.

Maeda teaches that a table module relating the processing modes of the post-processing modules and all possible values of the input parameters (a management table of Fig. 4, col 14, lines 32-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zhong to include a table module relating the processing modes of the post-processing modules and all possible values of the input parameters taught by Maeda to manage the image processing so that appropriate image processing is applied to each inputted image data and that time-wasting image processing is not applied to image data improperly inputted (col 3, lines 11-16).

Regarding **claim 16**, Zhong teaches wherein the computer program code for selecting the suitable processing modes comprises a computer program code (Para. [0039]), and defining the suitable processing modes to be used for a given range of input parameter values (Figures 7 & 9, Para. [0045]).

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Zhong differs from claim 16, in that he does not teach that generating a table.

Maeda teaches that generating a table (col 14, lines 37-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zhong to include generating a table taught by Maeda to manage the image processing so that appropriate image processing is applied to each inputted image data and that time-wasting image processing is not applied to image data improperly inputted (col 3, lines 11-16).

Regarding **claim 17**, Zhong teaches wherein the computer program code (Para. [0039]) comprises a computer program code for: a. obtaining the processing modes available in the post-processing modules (post-processing module 611 of Fig. 6 & Para. [0034]); b. obtaining all combinations of processing modes (Figures 2-10, Para. 0039 & 0045), each combination containing one processing mode from each processing module (Para. [0036]); c. obtaining output quality for each combination of the processing mode (Para. [0036]); d. arranging the combinations of processing modes in increasing order of complexity (Figs. 2-10, Para. 0035, 0036, 0039); e. eliminating the combinations that do not give higher quality compared to the combinations having lower complexity (Figs. 2-10, Para. 0035, 0036, 0039); and f. allocating ranges of input parameter values for each combination of processing modes (Fig. 9, Para. [0045]).

Zhong differs from claim 17, in that he does not teach that generating a table.

Maeda teaches that generating a table (col 14, lines 37-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zhong to include generating a table taught by Maeda to manage the image processing so that appropriate image processing is applied to each inputted image data and that time-wasting image processing is not applied to image data improperly inputted (col 3, lines 11-16).

5. Claims 5 & 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhong et al (Zhong) (US 2004/0247034) in view of Clark (US 6,142,942) as applied to claims 1 & 14 above, and further in view of Dugan et al (Dugan) (US 7,162,098).

Regarding **claim 5**, Zhong differs from claim 5, in that he does not expressly teach wherein one of the input parameters is user preference, the user preference indicating choice of output quality of the media data.

Dugan teaches that one of the input parameters is user preference {user choice}, the user preference indicating choice of output quality of the media data (col 3, lines 23-42 & col 6, lines 8-11)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Zhong to include one of the input parameters is user preference, the user preference indicating choice of output quality of the media data taught by Dugan to provide manual operation (col 6, lines 5-11).


Regarding **claim 20**, the structure elements of system claim 5 perform all steps of computer program product claim 20. Thus claim 20 is rejected under 103(a) for the same reason discussed in the rejection of claim 5.

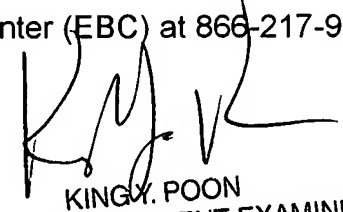
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Kau whose telephone number is 571-270-1120 and fax number is 571-270-2120. The examiner can normally be reached on M-F, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571-272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


S. Kau
Patent Examiner
Division: 2625
September 10, 2007


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